



0000132031

## BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission

**COMMISSIONERS**

GARY PIERCE - Chairman  
PAUL NEWMAN  
SANDRA D. KENNEDY  
BOB STUMP  
BRENDA BURNS

**DOCKETED**

NOV 17 2011

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IN THE MATTER OF THE APPLICATION  
OF ARIZONA SOLAR ONE, LLC IN  
CONFORMANCE WITH THE  
REQUIREMENTS OF ARIZONA REVISED  
STATUTES §§ 40-360.03 AND 40-360.06, *et*  
*seq.* FOR A CERTIFICATE OF  
ENVIRONMENTAL COMPATABILITY  
AUTHORIZING CONSTRUCTION OF THE  
SOLANA GENERATING STATION,  
LOCATED IN SECTION 9, TOWNSHIP 6  
SOUTH, RANGE 7 WEST, MARICOPA  
COUNTY ARIZONA.

DOCKET NO. L- 00000GG-08-0407-00139

CASE NO. 139

IN THE MATTER OF THE APPLICATION  
OF ARIZONA SOLAR ONE, LLC IN  
CONFORMANCE WITH THE  
REQUIREMENTS OF ARIZONA REVISED  
STATUTES §§ 40-360, *et seq.*, FOR A  
CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AUTHORIZING THE  
CONSTRUCTION OF THE SOLANA GEN-  
TIE, WHICH ORIGINATES AT THE  
SOLANA GENERATING STATION,  
LOCATED IN MARICOPA COUNTY, AND  
TERMINATES AT THE PANDA 230 kV  
SUBSTATION, LOCATED IN GILA BEND,  
ARIZONA.

DOCKET NO. L- 00000GG-08-0408-00140

CASE NO. 140

**ORDER MODIFYING**  
**DECISION NO. 70639**DECISION NO. 72680**BY THE COMMISSION:**

Pursuant to A.R.S. § 40-252, on September 29, 2011, Arizona Solar One, LLC ("Solar One" or "Company") filed a request with the Arizona Corporation Commission ("Commission") for a revision to its Certificate of Environmental Compatibility ("CEC") authorizing the construction of a single circuit 230 kV transmission line using either single or double circuit towers ("Gen-Tie line"). The Company is seeking two amendments to the order. The first amendment will allow the Company to place a second set of conductors on the double circuit towers. The second amendment will allow Solar One to use four H-frame transmission structures rather than monopole towers in one location along the CEC route.

**FINDINGS OF FACT**

1  
2 1. Decision No. 70639, entered on December 11, 2008, granted Solar One's  
3 application for a CEC to construct a 230 kV gen-tie transmission line running from the Solana  
4 Generating Station site to Arizona Public Service Company's ("APS") Panda Substation. The  
5 CEC also authorized an alternative route for the Gen-Tie line that would interconnect with the  
6 APS Gila Bend Substation.

7 2. Decision No. 70639 authorized the installation of double circuit towers but only  
8 permitted the use of a single circuit. In the course of engineering the Gen-Tie line, Solar One  
9 identified additional efficiencies that could be obtained through the use of a second set of  
10 conductors, which will still be operated in a single circuit in conjunction with the existing set of  
11 conductors. The efficiencies will include reduced line loss in the transmission of electricity  
12 generated at the Solana Generating Station. The second set of conductors will also improve  
13 reliability insofar as the loss of a single set of conductors will no longer prevent the continued  
14 operation of the transmission line.

15 3. Additionally, during the engineering of the Gen-Tie line, Solar One identified a  
16 location where the Gen-Tie line would encounter the existing APS 230 kV Panda - Gila Bend  
17 transmission line. Crossing the Gen-Tie line beneath APS's transmission line would require the  
18 use of two H-Frame towers of approximately 63 to 66 feet in height rather than monopole  
19 towers. Likewise, the presence of wastewater treatment ponds adjacent to the line crossing  
20 location will necessitate the use of another two H-Frame towers of approximately 116 feet in  
21 height in order to span the ponds.

22 4. Solar One did not include samples of H-Frame towers in either the application for  
23 CEC or among its exhibits presented during the hearing before the Line Siting Committee.  
24 Construction of the Gen-Tie line will require approximately 126 additional transmission towers.  
25 The Company will utilize monopole structures for these remaining 126 transmission towers.

26 5. On September 29, 2011, the Company filed an Application to Amend Arizona  
27 Corporation Commission Decision No. 70639. In the Application, Solar One requested  
28 modification of Decision No. 70639 to permit use of a second set of conductors and to use four

1 H-Frame towers. A description of the H-Frame towers was included in the Application and is  
2 attached as Exhibit A.

3 6. On October 17, 2011, the Company filed in the docket letters of support for the  
4 requested modifications. The letters were provided by the other two parties to the docket,  
5 Paloma Irrigation & Drainage District and the Sierra Club, Grand Canyon Chapter. An  
6 additional letter was provided by the Director of Planning and Economic Development for the  
7 Town of Gila Bend.

8 7. It is reasonable and appropriate to amend the CEC to permit Solar One to operate  
9 the Gen-Tie line using a second set of conductors. Additionally, it is reasonable and appropriate  
10 to amend the CEC to permit the Company to use four H-Frame towers to cross under the existing  
11 APS 230 kV Panda - Gila Bend transmission line and to span the adjacent wastewater treatment  
12 ponds.

### 13 CONCLUSIONS OF LAW

14 1. The Commission has jurisdiction over Arizona Solar One, LLC and the subject  
15 matter contained herein pursuant to A.R.S. §§ 40-252 and -360, *et seq.*

16 2. Notice of the proceeding has been given in the manner prescribed by law.

17 3. The Commission, having reviewed and considered Arizona Solar One, LLC's  
18 application to amend Decision No. 70639, concludes that it is in the public interest to amend the  
19 Certificate of Environmental Compatibility as set forth in Finding of Fact No. 7 and to modify  
20 Decision No. 70639, accordingly.

### 21 ORDER

22 IT IS THEREFORE ORDERED that upon due consideration of this matter and notice  
23 and opportunity to be heard, the Commission hereby modifies Decision No. 70639 to authorize  
24 the use of four H-Frame transmission structures, described in the attached Exhibit A, for the  
25 purpose of crossing beneath the Arizona Public Service Company's existing 230 kV Panda - Gila  
26 Bend transmission line and to span the adjacent wastewater treatment ponds.

27 ...

28 ...

1 IT IS FURTHER ORDERED that the CEC issued by the Line Siting Committee and  
2 granted by the Commission on December 11, 2008 by Decision No. 70639 is modified at page 3,  
3 lines 1-3 to read as follows:

4 The Project as approved consists of approximately 20 miles of 230 kV  
5 transmission line and required substation and switchyard facilities and  
6 modifications. The single-circuit may be constructed on either single-circuit or  
double-circuit towers and may utilize two sets of conductors operated as a single-  
circuit on double-circuit towers.

7 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

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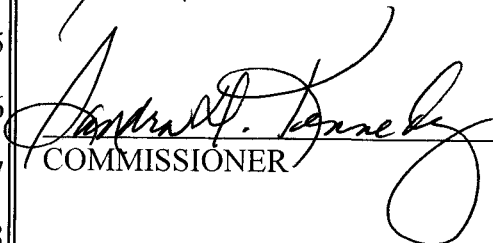
27 ...

28 ...

## BY ORDER OF THE ARIZONA CORPORATION COMMISSION

  
CHAIRMAN

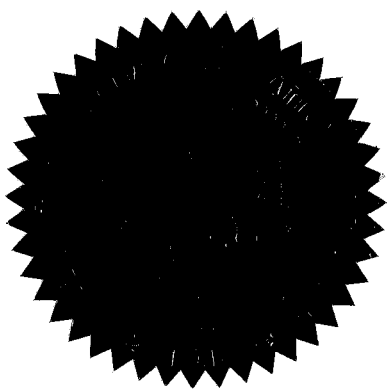
  
COMMISSIONER

  
COMMISSIONER

**EXCUSED**  
COMM. NEWMAN

COMMISSIONER

  
COMMISSIONER



IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,  
Executive Director of the Arizona Corporation  
Commission, have hereunto, set my hand and caused the  
official seal of this Commission to be affixed at the Capitol,  
in the City of Phoenix, this 17<sup>th</sup> day of  
November, 2011.

  
ERNEST G. JOHNSON  
EXECUTIVE DIRECTOR

DISSENT: \_\_\_\_\_

DISSENT: \_\_\_\_\_

1 Original and Thirteen (13)  
2 copies of the foregoing filed this  
3 7<sup>th</sup> day of November, 2011 with:

4 Docket Control  
5 Arizona Corporation Commission  
6 1200 West Washington Street  
7 Phoenix, Arizona 85007

8 Copies of the foregoing  
9 mailed this 7<sup>th</sup> day of  
10 November, 2011 to:

11 John Foreman, Chairman  
12 Arizona Power Plant and  
13 Transmission Line Sitting Committee  
14 Office of the Attorney General  
15 1275 West Washington Street  
16 Phoenix, Arizona 85007

17 Thomas H. Campbell  
18 Albert H. Acken  
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20 40 North Central Ave., Suite 1900  
21 Phoenix, Arizona 85004-4429

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25 Jay Moyes  
26 Jeffrey Zimmerman  
27 1850 North Central Avenue, Suite 1100  
28 Phoenix, Arizona 85004

# EXHIBIT A





Structures 17/4 and 17/5  
230 kilovolt Double Circuit Structure

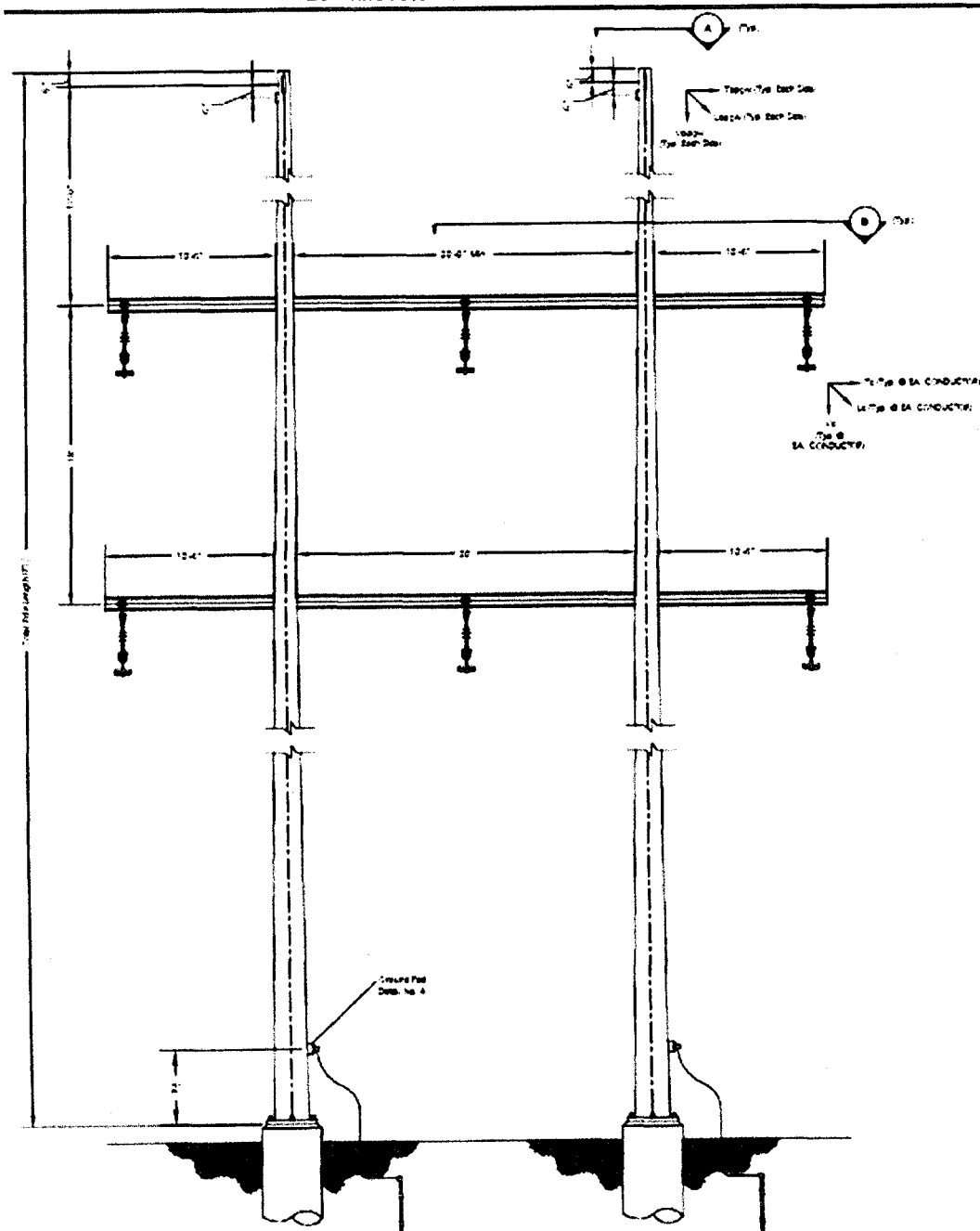


Exhibit 2